



Atty. Dkt. No. 039363-0703

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Ryan Bremer et al.  
Title: CRYSTAL STRUCTURE OF PIM-1 KINASE  
Appl. No.: 10/664,421  
Filing Date: 09/16/2003  
Examiner: Nashed  
Art Unit: 1656  
Confirmation Number: 3203

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August 15, 2006  
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**UNDER 37 CFR §1.56**

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Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(c), before the mailing date of either a final action under 37 CFR §1.113, a notice of allowance under 37 CFR §1.311, or an action that otherwise closes prosecution in the application.

**RELEVANCE OF EACH DOCUMENT**

All of the documents are in English.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

**FEE**

A credit card payment form in the amount of \$180.00 is enclosed in accordance with 37 CFR §1.17(p) to cover the fee associated with an information disclosure statement under 37 CFR §1.97(c) in the amount of \$180.00.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by the credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872.

Respectfully submitted,

Date 8/15/06

By RJW

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AUG 21 2006

MODIFIED PTO/SB/08 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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of

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## Complete if Known

Application Number	10/664,421
Filing Date	09/16/2003
First Named Inventor	Ryan Bremer
Group Art Unit	1656
Examiner Name	Nashed

Attorney Docket Number 039363-0703

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
A1	20010008765			Shinoki et al.	07/19/2001	
A2	20010012537			Anderson et al.	08/09/2001	
A3	20010014448			Chappa et al.	08/16/2001	
A4	20010014449			Nerenberg et al.	08/16/2001	
A5	20010016322			Caren et al.	08/23/2001	
A6	20010018642			Balaban et al.	08/30/2001	
A7	20010019827			Dawson et al.	09/06/2001	
A8	6100254			Budde et al.	08/08/2000	
A9	6197495			Qui et al.	03/06/2001	

## UNPUBLISHED U.S. PATENT APPLICATION DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
A10	WO	99/26966			The Regents of the University of California	06-03-1999		
A11	WO	01/58951			Stichting Voor de Technische Wetenschappen	08-16-2001		
A12	WO	02/24722			Prochon Biotech Ltd.	03-28-2002		

## NON PATENT LITERATURE DOCUMENTS

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				Group Art Unit	1656
				Examiner Name	Nashed
(use as many sheets as necessary)				Attorney Docket Number	039363-0703
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	A13	BOEHM, <i>et al.</i> , "Novel Inhibitors of DNA Gyrase: 3D Structure Based Biased Needle Screening, Hit Validation by Biophysical Methods, and 3D Guided Optimization. A Promising Alternative to Random Screening," <i>J. Med. Chem.</i> 43:2664-2674 (2000)	
	A14	BOHACEK, <i>et al.</i> , "Multiple Highly Diverse Structures Complementary to Enzyme Binding Sites: Results of Extensive Application of a <i>de Novo</i> Design Method Incorporating Combinatorial Growth," <i>J. Am. Chem. Soc.</i> 116:5560-5571 (1994)	
	A15	CHONG, <i>et al.</i> , "Molecular dynamics and free-energy calculations applied to affinity maturation in antibody 48G7," <i>PNAS</i> 96:14330-14335 (1999)	
	A16	CORNELL, <i>et al.</i> , "A Second Generation Force Field for the Simulation of Proteins, Nucleic Acids, and Organic Molecules," <i>J. Am. Chem. Soc.</i> 117:5179-5197 (1995)	
	A17	DONINI and KOLLMAN, "Calculation and Prediction of Binding Free Energies for the Matrix Metalloproteinases," <i>J. Med. Chem.</i> 43:4180-4188 (2000)	
	A18	DOWNS and WILLETT, "Similarity Searching and Clustering of Chemical-Structure Databases Using Molecular Property Data," <i>J. Chem. Inf. Comput. Sci.</i> 34:1094-1102 (1994)	
	A19	ELCOCK, Realistic modeling of the denatured states of proteins allows accurate calculations of the pH dependence of protein stability. <i>J. Mol. Biol.</i> , 294:1051-1062, (1999).	
	A20	FELDER, "The Challenge of Preparing and Testing Combinatorial Compound Libraries in the Fast Lane, at the Front End of Drug Development," <i>Chimia</i> 48:531-541 (1994)	
	A21	GILLILAND and LADNER, Crystallization of biological macromolecules for X-ray diffraction studies. <i>Current Opinion in Structural Biology</i> , 6:595-603, (1996).	
	A22	JARVIS and PATRICK, "Clustering Using a Similarity Measure Based on Shared Near Neighbors," <i>IEEE Transactions on Computers</i> 11:1025-1034 (1973)	
	A23	KE and DOUDNA, Crystallization of RNA and RNA-protein complexes. <i>Methods</i> , 34:408-414, (2004).	
	A24	MASSOVA and KOLLMAN, "Computational Alanine Scanning to Probe Protein – Protein Interactions: A Novel Approach to Evaluate Binding Free Energies," <i>Journ. of Amer. Chem. Soc.</i> 121(36):8133-8143 (1999)	

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	A25	MCGOVERN, et al., "A Common Mechanism Underlying Promiscuous Inhibitors from Virtual and High-Throughput Screening," <i>J. Med. Chem.</i> 45:1712-1722 (2002)		
	A26	OBRECHT, et al., "Solid-Supported Combinatorial and Parallel Synthesis of Small-Molecular-Weight Compound Libraries," <i>Linker Mol. &amp; Cleav. Strat.</i> P. 85.		
	A27	OWEN, et al., "Two Structures of the catalytic domain of phosphorylase kinase: an active protein kinase complexed with substrate analogue and product," <i>Curr. Biol. Ltd.</i> 3:467-482 (1995)		
	A28	PEARLMAN and CHARIFSON, "Are Free Energy Calculations Useful in Practice? A Comparison with Rapid Scoring Functions for the p38 MAP Kinase Protein System," <i>J. Med. Chem.</i> 44:3417-3423 (2001)		
	A29	RIPKA, et al., "Aspartic Protease Inhibitors Designed from Computer-Generated Templates Bind as Predicted," <i>Org. Lett.</i> 15:2309-2312 (2001)		
	A30	WIENCEK, New strategies for protein crystallization growth. <i>Ann.Rev.Biomed.Eng.</i> , 1:505-534, (1999).		
	A31	WILLETT, "Chemical Similarity Searching," <i>J. Chem. Inf. Comput. Sci.</i> 38:983-996 (1998)		

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	A32	YANG et al., Peptide analogs from E-cadherin with different calcium-binding affinities. J. Peptide Research, 55:203-215, (2000).	

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